

With the Author's
Compliments

Annual Statistical Report

OF THE

(24)

EYE DISEASES



TREATED AT

The "Ophthalmic Institute" of Malta

From July 1908 to July 1909

BY

C. MANCHÉ B.A., M.D.

MEMBER OF THE OPHTHALMOLOGICAL SOCIETY
OF THE UNITED KINGDOM.



MALTA

Printed by G. MUSCAT, 48 Strada Mercanti, Valletta
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TO MY FATHER,

“THE FOUNDER OF OPHTHALMOLOGY IN MALTA”,

IN TOKEN OF LOVE AND GRATITUDE

ANNUAL STATISTICAL REPORT

OF THE

“ Ophthalmic Institute ” Malta

THE OPHTHALMIC INSTITUTE at Hamrun, the only one of its kind in Malta, may be well said to have filled a gap in the local Philanthropic Institutions, for, when the daily attendance of the out door patient department and the number of operations performed, during its first year's existence, are taken into account, they prove for themselves that such an institution has not only been of great utility to the general public, but one of absolute necessity.

My father, after forty years incessant professional practice, has of late resigned his services with the Government as Professor of Ophthalmology at the Malta University and Ophthalmic Surgeon to the Civil Hospital. I however, knowing his charitable disposition and how much the poorer classes, suffering from eye-disease, would have lost by his complete retirement from practice and being aware he had no place wherein to see to these patients, persuaded him to help me in founding the existing Ophthalmic Institute.

The Institute, bearing the above title and provided with all that is necessary for Ophthalmic practice on the latest style, as far as circumstances permitted, was accordingly founded at Hamrun. The site chosen is very convenient being within reach of nearly all the towns and villages of Malta, owing to the Train running on one side of the building and the Electric Tram on the other.

The Institute is open to the public on all week-days

between the hours of 9 and 12. The poor are attended to gratuitously, while the higher classes are left free to offer whatever they think proper as a voluntary contribution towards the maintenance of the establishment. Hence the scope of the institution remains purely philanthropic, in accordance with what I declared in the circular distributed to the local Press, the Parish Priests and other persons of influence in both Islands, on the occasion of the inauguration of the Institute on the 22nd July 1908.

I do not by any means intend to demonstrate in this first annual report the benefit which the public is reaping out of the Institute; facts speak for themselves. I cannot however refrain from observing, that, the excellent results obtained in the very first year of existence of the Institute, have given me sufficient encouragement to induce me to go on in the work I have prefixed for myself; in the hope, that the general public will feel grateful to me for my disinterested action in favour of the sufferers from eye-diseases, which unfortunately prevail to a considerable extent in these Islands.

As it results from the Institute's Registers, (which are available for inspection to all medical practitioners) the number of in door patients, viz: those requiring serious operations, rest in bed and proper attendance, summed up with that of the out door patients, went up, during the year, to the high figure of one thousand, two hundred and fifty one (1251). The number of patients examined and dressed daily averaged between 30 and 40 and on several occasions went even up to 80 in one day. The number actually admitted into the Institute for operative purposes was ten, and their detention there varied between ten days and one month.

To render the report of the diseases I have treated during the year still clearer, I shall first give a general summary of all the cases registered, subdividing them according to the part of the eye affected; I shall next

consider each class separately, noting the more interesting cases; and shall finally give a brief account of the operations I performed, describing the operative methods I deemed it preferable to adopt.

GENERAL SUMMARY OF THE DISEASES REGISTERED
ACCORDING TO THE PART OF THE EYE AFFECTED.

	Males	Females	Total
Diseases of the Eyelids... ..	27	42	69
Diseases of the Lachrymal } Apparatus	8	16	24
Diseases of the Conjunctiva... ..	445	509	954
Diseases of the Cornea... ..	33	36	69
Diseases of the Sclerotic	1	1	2
Diseases of the Iris	4	6	10
Diseases of the Lens	22	30	52
Diseases of the Fundus... ..	26	14	40
Glaucoma	6	7	13
Derangements of the Orbital } Muscles	4	3	7
Diseases of the Eyeball... ..	6	5	11
Total	582	669	1251

From the above summary it is evident that the conjunctiva gave the highest percentage of diseases, and next in order come the cornea, the eyelids, the lens and finally the *fundus oculi*, under which have been included the diseases of the chorioid, retina and optic nerve. Errors of Refraction and Accommodation have not been taken into account, because such cases are not worked out in the Institute, but are attended to in the afternoon at my residence, where they are carefully examined and their errors of refraction corrected by means of Retinoscopy, their names being entered into a special register kept for the purpose.

To avoid prolixity, I intend giving only a very brief account of the cases treated in the Wards of the Institute and of those observed in the out door department. I must not however omit to state that, important operations excepted, (such as: Cataract extraction, Iridectomy, Enucleation, Plastic operations and the like); operations of minor importance are performed in the Operating Room of the Establishment also, but these patients are allowed to go home and directed to attend, on the days following the operation, for the usual dressing until completely cured.

DISEASES OF THE EYELIDS

	Males	Females	Total
Blepharitis	10	8	18
Epithelioma	2	1	3
Trichiasis	10	24	34
Chalazion	3	4	7
Eczema	0	1	1
Abscess	0	1	1
Dermoid Cyst... ..	0	3	3
Entropion	2	0	2
Total	27	42	69

The total number given under this heading is 69, including 27 males and 42 females. The majority (34) were cases of Trichiasis and Distichiasis, with more or less marked Entropion, the result of previous attacks of Trachoma. This does not however represent the total number of cases of Trichiasis observed, because only those suffering from abnormal deviation of the eyelashes, without the Trachomatous process being in action, are enumerated here; while at least another hundred cases of Trichiasis were detected among those suffering from Trachoma, which had to be necessarily included with the

Diseases of the Conjunctiva. The cases worth recording here are those of Epithelioma and those of Entropion. Among those of Epithelioma, the one deserving special mention was the case of an Englishman, * J.A., 69 years of age, who had been suffering for the previous four years, from an ulcerated growth, which, when I first saw him, extended over the greater part of his left lower eyelid and the same side of the nose, penetrating deeply into the orbit, with destruction of the caruncula, and causing adhesion of the eyeball to the inner orbital wall. At first sight, I made up my mind for plastic operation with total extirpation of the growth. After thorough examination, however, of the extent involved and of the general health of the patient, which was by no means promising, I was obliged to abandon the idea of surgical treatment. Medical treatment being the only resource left, I prescribed Chlorate of Potash, in saturate solution and later in the form of a 10 % ointment, to be constantly applied to the ulcerated part. By this means I succeeded, after four months treatment, in obtaining complete healing of the part affected.

The second case of Epithelioma was given by a woman, who presented a small tumour at the inner canthus on the left side, originating from the skin on the side of the nose; and the third, of the shape of an ulcerated wart, situated on the inner side of the right lower lid, was observed in a countryman. These two cases resulted in complete cure after extirpation.

In both the cases of Entropion of the lower eyelid mentioned above, an autoplasmic operation gave the desired effect, a detailed account of which will be given later in the Report.

* See note presented at the International Ophthalmological Congress held at Naples in April 1909.

DISEASES OF THE LACHRYMAL APPARATUS

	Males	Females	Total
Stricture of the Nasal Duct } ...	8	12	20
with Dacryocystitis }			
Lachrymal Fistula... ..	0	4	4
Total	8	16	24

The number of patients suffering from this class of disease was 24, viz 8 males and 16 females. Without going into the details of each case, I shall simply state that in some, stricture of the canaliculi only was present, while in others the sac was greatly altered and dilated, constituting mucocoele.

Lachrymal fistula occurred in four cases. Worthy of note was the case given by a woman, with extensive ecchymosis of the left cheek, due to a false passage, performed elsewhere, a month previous to her coming under my observation. After a most delicate and patient treatment, extending over a period of three months, I succeeded in curing her, bringing back her nasal duct once more to normal action.

Convinced as I am, that the lachrymal apparatus is to be preserved as far as possible anatomically intact, its essential prerogative residing principally in its capillarity, and should not hence be, as heretofore, so lightly turned into a drainage tube, I hold, that the less it is altered by means of operative proceedings and the more its function is respected in its integrity, the better will be the final results obtained. Abiding therefore by the opinion expressed by Wecker, Panas, Tartuferi and Guaita; and following more closely the purport of the very comprehensive paper on the subject, read by Doctor Giovanni Petella, at the

XVIII Congress of the Italian Ophthalmological Society, I have always tried to preserve as far as possible anatomically intact in all its parts the delicate apparatus in question, by putting all the means of conservative treatment in my power to the test, recurring only to its destruction in cases of absolute necessity. In treating therefore the diseases of this apparatus, I own with Doctor Petella that the specialist should have the following maxims in view :

- (1) To try and reestablish the perviousness of the parts and avoid the settling of liquids in the sac.
- (2) To try and combat the secretion and modify the pathological condition of the mucous membrane.
- (3) To try and restore as far as possible to the parts and more especially to the sac their primitive configuration.

By means of dilatation of the puncta and canaliculi, irrigation of the sac and probing of the nasal duct with the utmost care and caution, I very often succeed in obtaining good results; viz : the reestablishment of the flow of tears and the modification of the state of the mucous membrane lining the passage.

A good result was obtained in three of the cases of fistula, after enlargement of the fistular opening and thorough cleansing of the sac with a scoop, followed by antiseptic plugging and Bowman's operation. The fourth patient refused to submit to this treatment. In five only, out of the 20 cases of obstruction mentioned, Bowman's operation was found necessary, and this was only resorted to after a fair trial had been given to the conservative treatment.

DISEASES OF THE CONJUNCTIVA

	Males	Females	Total
Acute Catarrhal Conjunctivitis ...	30	20	50
Chronic Catarrhal Conjunctivitis...	23	27	50
Flyetenular Conjunctivitis	4	11	15
Purulent Conjunctivitis	2	4	6
Grannlo-Trachomatous Con- junctivitis } ...	360	420	780
Morax-Axenfeld's Conjuncti- vitis } ...	11	3	14
Koch-Weeks' Conjunctivitis ...	4	11	15
Polypus of the Conjunctiva... ..	0	1	1
Ecchymosis of the Conjunctiva ...	1	0	1
Subconjunctival Cysticercus ...	0	1	1
Xerophthalmos	0	2	2
Pterygium	10	8	18
Atrophy of the fornix	0	1	1
Total	445	509	954

The diseases of the Conjunctiva went up to 76.2 % of the total number of cases registered, Trachoma alone giving 62.3 % of the conjunctival affections. Of the 954 patients observed, 445 were males and 509 females.

I will not attempt to give here a detailed account of all these cases, as my doing so would only render this report tedious. I shall therefore limit myself to elucidate the merely necessary, reserving the study of Trachoma in Malta for a separate publication at some future date. The high percentage given by this group will be easily accounted for, if one takes into consideration the comparatively large surface presented by the conjunctiva to external influences, as compared to other parts of the eye, the more so, as the majority of the diseases affecting this membrane are of a contagious nature. Again, the dust, the heat of the climate of Malta, the glare due to the streets

and buildings, (which owing to our calcareous stone are of a white hue), and above everything else the neglect of those principles of hygiene among our lower classes, which naturally results in dirt; the living together of an entire family in a couple of damp and insufficiently ventilated rooms, particularly when the common use of the linen and toilet utensils is the rule; are so many factors favouring the propagation of these diseases to the members of the same family. not to say to all parts of the two Islands. These diseases on the other hand, reach the higher classes in the towns mostly through children being entrusted, by not sufficiently careful parents, to servants suffering from the disease.

Acute Catarrhal Conjunctivitis was met with in 50 cases, the Chronic Catarrhal form in an equal number, the Morax-Axenfeld type in 14 and the Koch-Weeks kind in 15. The application of disinfecting lotions, Nitrate of Silver drops and those of the Sulphate of Zinc, Protargol, Cocaine etc., according to each type of Catarrh, sufficed to combat the above diseases in a comparatively short time.

Flyctenular Conjunctivitis gave 15 cases, all in children, who, under the usual local treatment, tonics and good hygiene recovered completely bearing no further traces of the disease.

Of Purulent Conjunctivitis only six cases were observed, four in the new-born and two in adults. Three of the new-born ended in complete recovery; the fourth was also cured, but as the case was brought to the Institute when the disease was in a very advanced stage, a central leucoma remained on both corneæ. Of the two adults, one recovered completely, while the other only regained the sight of the eye after iridectomy, performed four months later.

The Granulo-Trachomatous type of Conjunctivitis offered cases of all kinds and description; acute and chronic, monocular and binocular, in children and in adults, isolated or

affecting various members of the same family, with or without complications. Among the latter complications were noted, Blepharophimosis, Trichiasis and Distichiasis, Ectropion, Entropion, more or less marked Pannus, Corneal Ulcers of various size, Facets, Leucomata, Symblepharon and Xerophthalmos of different gravity, as well as Atrophy of the eyeball. What particularly struck me is the frequency with which the lachrymal passages become infected in cases of Trachoma, and the fact, that such cases improve under treatment, only when the condition of the canaliculi and that of the sac have been thoroughly attended to. The treatment used was mainly surgical, viz: scraping of the palpebral conjunctiva *superficial*, but *repeated* at least twice a week, followed by ample irrigation with a mild solution of Corrosive Sublimate, Protargol drops, Yellow Oxide of Mercury Ointment, Picric Acid etc.; these being variously used in accordance with the symptoms presented by each case. The number of complete recoveries in some and of great amelioration in others has been truly remarkable, quite exceeding my expectations. In fact the thronging of so many patients to the Institute and the numerous chronic cases in persons, who had been unable to work for years, and who were so much improved as to be able to resume their former calling, sufficiently bears out my statement. A good number of these patients, as soon as they felt better, were seen no more; while some others still attend, owing to relapses, due in the greater part to their having given up the treatment too early. The average duration of attendance for each trachomatous patient was between two and three months, thus the number of patients on whom scraping of the conjunctiva was performed amounted to between 25 and 30 a day.

The polypus of the conjunctiva, mentioned above, was in a woman. It was situated at the inner side of the superior fornix on the right side, and owing to palpebral

pressure was of a wide and flattened shape. Excision ended in complete recovery.

The subconjunctival cysticercus, a cyst of rather rare occurrence, was observed in the right lower lid of a girl. On everting the lid and pressing the thumb downwards and backwards into the orbit, the cyst was made to project well out, occupying nearly the whole extent of the conjunctival surface of the lid, under which it was freely movable. The treatment consisted in excising it with scissors. As the cyst did not present, on its anterior aspect, the opaque white spot, described by Sichel, to corroborate the diagnosis, I collected the greater part of the fluid contained in the cyst, and succeeded in detecting the hooklets of the cysticercus under the microscope.

The case of complete ecchymosis of the conjunctiva was observed in the left eye of a middle-aged man. The absence of inflammation and the cause alleged by the patient made it a case of rather uncommon occurrence. He stated that it had come on a few hours after the penetration of the juice of an elaterium capsule (*Ecballium Elaterium*), which he accidentally hit and burst while digging in his garden. He came to the Institute two days after the accident, presenting complete ecchymosis of the conjunctiva, which was of a dark red colour. There was no chemosis and the eye was not discharging. After a few days application of Chloride of Sodium lotion the eye regained its normal appearance.

The two cases of Xerophthamos occurred in females of advanced age, and were accompanied by Trichiasis and Symblepharon. The sight being totally lost in both patients, they were sent back as incurable.

Atrophy of the lower fornix was observed in a woman, whose left eye had been enucleated elsewhere, some eighteen years previously. Finding it however no longer possible to wear the artificial eye, she came to the Institute to consult me. Plastic operation was resorted to, but owing

to the adhesions consequent on a similar operation already performed elsewhere, she did not succeed in obtaining the desired effect.

Lastly, the patients observed suffering from Pterygium amounted to 18 in all, viz: 10 males and 8 females. Ablation by Arlt's method was performed in seventeen instances, seven males and six females presenting the growth on one side, while two other females required the operation on both sides. Complete recovery was obtained in all, with the exception of slight corneal opacity in some of the worst cases; notwithstanding that some were of the fleshy type and nearly reached the centre of the cornea. The three remaining patients refused to submit to the operation and were not to be seen again at the Institute.

DISEASES OF THE CORNEA

	Males	Females	Total
Ulcer of the Cornea	10	10	20
Ulcus Serpens	5	2	7
Staphyloma of the Cornea	1	3	4
Leucoma... ..	10	20	30
Adherent Leucoma	4	1	5
Foreign body in the Cornea	2	0	2
Epithelioma of the Cornea	1	0	1
Total	33	36	69

The diseases of the Cornea, excluding those complicating Trachoma enumerated above, amounted to 69; males accounting for 33 cases, and females for 36.

Twenty-seven was the number of patients treated during the year for corneal ulcers, seven of which were complicated with hypopyon. One of the last mentioned cases did not give a satisfactory result, notwithstanding the energetic treatment used, it being a case of asthenic ulcer

of the cornea in an old man suffering from general debility; the other six cases however ended in recovery, the treatment used being the medical in three of them; and the surgical, by Sæmisch's method, in the other three.

Advanced Staphyloma of the cornea was observed in four patients. The treatment was that of repeated paracentesis in two of them. The other two required evisceration to be followed by prothesis; these however refused to submit to the operation proposed to them.

The cases suffering from Leucoma, those complicating Trachoma being excluded, amounted to 35. Five of these were of adherent leucomata with loss of sight; the other thirty, being of recent date, and mostly in infants and young subjects, were greatly improved by means of the Yellow Oxide of Mercury Ointment and the Iodide drops.

Two extractions of foreign bodies in the Cornea, consisting of metallic fragments, were performed. The result was good in both cases, the patients being discharged after the second dressing.

Finally, the case of Epithelioma of the Cornea enumerated above, which is of very rare occurrence, was of considerable gravity and very interesting. The growth, in fact, which was only of one year's standing, had already extended itself all over the Cornea. It seemed to originate from the limbus on the inner side and was exceedingly prominent and nodulous in appearance, bleeding easily when touched. The patient, a countryman about 60, asked to have the tumour removed without touching the Cornea, which was close to impossible, as the Cornea formed part and parcel with the growth. He would not hear of enucleation, although it was highly desirable, considering the rapidity with which the malignant tumour was advancing and the possibility of checking the disease in good time, thus avoiding metastasis in other vital parts, and probably saving the man's life. The man was however very stubborn and has not returned to the Institute since.

DISEASES OF THE SCLEROTIC

	Males	Females	Total
Episcleritis 	1	1	2
Total	1	1	2

Only two cases of Episcleritis were observed, one in a man, the other in a woman; and, under proper treatment, more general than local, both ended in recovery.

DISEASES OF THE IRIS

	Males	Females	Total
Iritis 	2	3	5
Irido-Chorioiditis 	2	3	5
Total	4	6	10

The diseases of the Iris gave also a small contingent, the number of patients registered being only 10, viz: 4 males and 6 females.

Of the five cases of Iritis, two were syphilitic and three rheumatic. The general treatment in accordance with their nature, coupled with the local use of mydriatics resulted in recovery.

The same cannot however be said for the other five cases suffering from Irido-chorioiditis and Irido-cyclitis with more or less complete occlusion of the pupil. The treatment here was of little or no avail.

One case, occurring in a man, was due to operation of cataract, performed elsewhere, on the left eye, in which the nucleus, having been dislocated in the act of extraction, was left to float about in the vitreous. The inflammatory

process, ensuing after such operative treatment, was necessarily very severe, the patient complaining of great pain in the eye, which was very congested and exquisitely sensitive to slight pressure. Sedative treatment gave the patient sufficient relief for the time, but Sæmisch's operation had to be performed, a month later, to evacuate the hypopyon which followed. This relieved the patient still more, debarring me, for the moment, from performing enucleation on the operated eye, which I considered very necessary when I first saw the patient. Atrophy of the eyeball has since started, but I did not think it wise to remove the cataract on the right side, before being convinced that atrophy in the left eye is clearly definite.

DISEASES OF THE LENS

	Males	Females	Total
Senile Cataract (operable)	10	20	30
Senile Cataract (inoperable)... ..	6	6	12
Congenital Cataract	2	4	6
Soft Cataract... ..	1	0	1
Traumatic Cataract	3	0	3
Total	22	30	52

The number of cataracts observed in a year was rather large, considering the population of Malta; the number of patients however, who came forward to be operated upon, was comparatively small. The total for this disease, in fact, was 52, viz: 22 in males and 30 in females; while the number of operations performed amounted to seven only, two on males and five on females.

By looking back at the above summary it will be seen that of operable senile cataracts, that is, in a mature state and free from complications, there were 30 cases; while

the inoperable ones, that is, either still incipient or accompanied by some other disease of the fundus, amounted to 12. The remainder were, six of congenital cataract, (two of which were brother and sister, with posterior polar cataracts advancing in both eyes); one of soft cataract in one eye, the other being normal; and three of traumatic cataract, in which absorption had already started.

The main reason, for which some of these cases did not come forward to be operated upon, was their want of means to pay the small charge fixed for the operation and the expense necessary for their maintenance during their detention in the Institute. Others go on putting it off as long as they are able to go about with the help of the eye in which the cataract has not yet reached complete maturity; and will not probably present themselves for the operation, before they find it no longer possible to conduct themselves alone.

Although all the cases came out successfully, some of them were not by any means as simple as one would be inclined to think. One of the extractions of cataract was in fact performed on a woman, 75 years of age, who was suffering from hemiplegia on the left side consequent on cerebral hæmorrhage, which occurred two months previously, the patient being very anxious to regain her sight notwithstanding her age and paralytic condition. On another woman, operation for Trichiasis had to be performed before passing on to extraction of cataract, both operations being completely successful. Again one of the males, on whom the operation was carried out, had been suffering from Trachoma for many years, with marked blepharospasm, pannus at the upper part of the Cornea and a pterygium of decent size on its inner side, which, all taken together, rendered the operation extremely difficult and at the same time most dangerous.

The after-operative result was as follows: $V=6/6$ in two, $V=6/9$ in four cases, and $V=6/12$ in the other one.

DISEASES OF THE FUNDUS

	Males	Females	Total
Retino-chorioiditis... ..	5	5	10
Neuro-retinitis	2	1	3
Albuminuric Retinitis	1	0	1
Retinitis Pigmentosa	1	0	1
Abnormal Pigmentation around the macula in both eyes }... (congenital)	1	0	1
Embolism of Central Artery... ..	0	1	1
Thrombosis of Central Vein... ..	0	1	1
Detachment of Retina	0	2	2
Optic Atrophy	1	1	2
Tobacco Amblyopia and Alco- holic }	11	0	11
Posterior Staphyloma	0	1	1
Hæmorrhage in the Vitreous ...	4	2	6
Total	26	14	40

I have put the diseases of the retina, chorioid, optic nerve and vitreous, as well as the amblyopias, under one common heading, because the number observed for each was very small and the treatment used was mostly the medical, tonic and hygienic.

The patients observed suffering from fundus trouble reached 40, of which 26 were males and 14 were females.

Retino-chorioiditis gave 10 cases, some of which were so advanced as to defy all treatment.

Identical may be said to have been the result in the three cases of neuro-retinitis.

The case of Embolism of the central artery and that of Thrombosis of the central vein, both occurred in women, who lost the sight of one eye, treatment being well nigh useless. The ophthalmoscopic appearance of the fundus in these two last mentioned cases was strikingly characte-

ristic. In both cases Iodides and purgatives were prescribed, but no improvement seemed to result thereby.

The two cases of Retinitis were both observed in males: the Albuminuric Retinitis in an adult, subject to Bright's disease; the Retinitis Pigmentosa in a boy, whose mother stated, that two more of her children suffered from the same complaint, being unable, like the present boy, to conduct themselves alone after dusk. The treatment employed was directed to combat the kidney disease in the adult, the hygienic and tonic being prescribed for the boy. I am unable to give the result in these two instances, because both patients appeared no more at the Institute.

No result was obtained in the two cases of detachment of the retina, the treatment used being the sub-conjunctival injections of Chloride of Sodium and Potassium Iodide internally; neither in the two of Optic Atrophy did any improvement ensue, these four cases having been in a very advanced stage when first observed.

The posterior Staphyloma case, due to progressive myopia, was given the usual instructions as to the hygienic treatment to be adopted against the disease. Proper glasses were also prescribed.

Hæmorrhage in the vitreous, occupying the field to such an extent as to completely obscure the fundus to ophthalmoscopic examination, was noted in six cases. Two of these were of traumatic origin, the other four depended from nephritis. In three of the nephritis cases, the result obtained was not very satisfactory; but in the fourth, the dietetic regimen and Sodium Iodide in full doses procured the reabsorption of the extravasated blood, which left the vitreous sufficiently clear, and the sight of the eye improved a good deal.

Tobacco and Alcoholic Amblyopia was diagnosed in 11 instances. The lowering of the acuteness of vision was sufficiently marked in five of these cases, where the disease was of long standing and signs of incipient atrophy of the

optic nerve were already present. Treatment here was to no purpose. The other six patients, in whom the disease was just starting, presented the usual central scotoma, with change of colour for red and green, accompanied by moderate diminution of the visual acuity. These six cases, being still in time and following closely the treatment prescribed viz : full doses of the Iodides and Bromides, with total abstention from alcohol and tobacco, recovered their sight completely.

GLAUCOMA

	Males	Females	Total
Primary Glaucoma	1	1	2
Glaucoma Evolutum	1	1	2
Cataracta Glaucomatosa	2	2	4
Glaucoma Absolutum	2	3	5
Total	6	7	13

The patients, who attended for Glaucoma during the year, amounted to 13 in number, viz: 6 males and 7 females.

The two cases of Primary Glaucoma, accompanied by severe pains, were both in the left eye, one in a male and the other in a female. On the former, an old man from Gozo, iridectomy was performed, which lowered the tension and put a stop to the unbearable pains the patient had long been complaining of. The latter, a woman from Alexandria, on whom iridectomy had already been performed, a month previously by Prof: Cirincione of Palermo, still presented increased tension and severe pains. Myotics were prescribed, but the case could not be followed, because the patient soon left for Alexandria.

Two other cases were still in the first stage (glaucoma evolutum), one eye only being affected, and having refused iridectomy, were relieved by means of Pilocarpine drops.

Four were complicated with cataract (*cataracta glaucomatosa*), which was inoperable, owing to projection of light being absent.

The remaining five cases, being in the third stage (*glaucoma absolutum*), were incurable.

DERANGEMENTS OF THE ORBITAL MUSCLES

	Males	Females	Total
Concomitant Strabismus (in } ... children)	3	2	5
Paralysis... ..	0	1	1
Essential Tonic Blepharospasm ...	1	0	1
Total	4	3	7

Although errors of refraction are sufficiently frequent in these Islands, causing squint in a good number of cases; the subjects, suffering therefrom, do not actually seek for medical advice unless they are troubled by diplopia. This symptom is generally absent in long standing squint, the eyes having adapted themselves to their abnormal condition. Owing to the habit of disregarding the image of the squinting eye, which has become amblyopic through want of use, squinters find themselves sufficiently comfortable in the performance of their various duties using only the better eye; and do not consequently think it worth the while to have their deformity corrected by going through an operation for the sole sake of appearances. I agree fully in this principle with squinters of old standing; but I most decidedly condemn the parents of squinting children, who are yet in time to have not only the deformity of their children corrected, but the use of the squinting eye saved and improved by means of proper glasses and patient treat-

ment. This would eventually diminish the number of incurable squinters in the Islands, and at the same time enable the parents to ascertain what the boy or girl will be fit for when grown up; instead of preparing him or her for a situation, which when acquired, they will be found to be totally unfit for, owing to bad sight. Five cases only in fact of squint in children of the concomitant type were brought to the Institute during the year. Three, being of recent date, yielded to mydriatics and the use of proper correcting glasses; while the other two, in whom squint was very pronounced, refused to have the condition remedied by means of an operation.

Diplopia, which, as I said above, is the symptom that alarms the patient, was present in a woman, who was suffering from squint, due to paresis of the left superior rectus muscle. It yielded to the administration of the Iodides and Mercury internally, and the diplopia disappeared completely.

The case of essential senile tonic blepharospasm was bilateral and occurred in an old man from the Island of Gozo. The patient stated that his eyelids closed suddenly and forcibly at intervals against his will, and, when this came on in the street, he was obliged to stop, being no longer able to conduct himself. These spasmodic attacks were sometimes of short duration, at other times they lasted for a whole hour or even longer. The intervals between the attacks were also very irregular; the attacks appearing several times a day in some instances, while at others they disappeared completely for days or even weeks. On examining the eyes, nothing out of the normal could be detected. Bromides were prescribed, recommending a sound dietetic regimen coupled with hygienic living. The patient returned, a month after, stating that the frequency and severity of the attacks was greatly diminished, but that he had not as yet got rid of them altogether.

DISEASES OF THE EYEBALL

	Males	Females	Total
Panophthalmitis	0	1	1
Wounds	2	2	4
Injury by caustic agents	1	0	1
Foreign body	2	0	2
Atrophy	1	1	2
Glioma	0	1	1
Total	6	5	11

The diseases and injuries of the bulb reached 11, of which six were accounted for by males and five by females.

The majority were cases of wounds, the foreign body, causing them, being present in two of the cases and absent in the other four. Of the latter four wounds, the first was observed in a girl, and being very extensive, was accompanied by a large prolapse of the iris, which required to be excised; but the patient refused to have this done and was seen no more. The second, also in a girl, interesting the cornea and sclerotic at the outer inferior segment of the left eye, healed under the usual treatment. The third, in a boy, occupying the superior inner segment of the right eye and interesting only the conjunctiva and sclerotic, with slight loss of vitreous, also healed quickly under appropriate treatment, leaving no impairment of vision. The fourth, in an apprentice fitter, was caused by a piece of iron flying across the eye in the act of rivetting. The wound in this case interested the inner inferior segment of the left cornea, the capsule of the lens receiving also a slight abrasion, which could not of course be seen at the time, but was only made out later from the linear opacity appearing on the capsule, after complete recovery, and corresponding in direction with that of the corneal wound. I called it abrasion of the

capsule, because if the same had been slit across to the extent of the opacity remaining on it, traumatic cataract would have resulted without failure; while the lens is still clear and the slight impairment of vision left depends wholly on the linear opacity present in the capsule.

The two cases with foreign body still in the eye were both observed in adult males. One of them presented a small mark at the limbus, indicating the point at which the shot from a gun had entered the eye two months before he came to consult me. Traumatic cataract was present in the eye accompanied by ciliary congestion, the patient complaining of severe pain. The sight was completely lost. Palliative treatment was here resorted to, warning the patient to have the wounded eye enucleated if the pains continued; and still more urgently in case signs of irritation were to appear in the sound eye. The patient must have been benefited by the treatment, because he was never seen again.

The other case was far more interesting. The wound was due to a piece of iron, which pierced the sclerotic on the inner side of the left eye, embedding itself completely in the vitreous and drawing the pupil towards the same side. There was slight loss of vitreous, with protrusion of a small portion of chorioid from the wound; the sight was good, and, as the foreign body could not be detected, the eye was thoroughly disinfected and bandaged and the patient told to attend daily. Next morning I thought it proper to excise the small prolapse of chorioid; and, as the eye was not painful, I also probed the wound slightly in search of the foreign body, but not feeling it with the probe, which probably entered alongside of it, to avoid further traumatism in the same sitting, I disinfected the eye as before and applied the bandage. The next day the patient stated that he had felt something coming out of the eye during the night; and, on removing the dressing, I found the foreign body lying between the cotton wool

and the lower lid. It consisted of a bit of iron fully a third of an inch long, an eighth of an inch broad and about one sixteenth of an inch thick. The wound healed up quickly, leaving only a very slight degree of impairment of vision; the pupil remained excentric, with insufficient contractility to strong light.

The case of injury by caustic agents happened in the first engineer of a mercantile steamer, who was attending to the engine, when, owing to the ship's rolling, a vessel, containing a saturate solution of Caustic Soda, came down from a shelf opposite him; and, he being in a stooping posture, the splashing of its contents off the floor, got into his right eye. The case was so serious, that the Captain of the boat thought it advisable to steer back to our harbour, which he had only left an hour before the accident took place. The patient was landed and brought to the Institute. On examination it was found, that the lower lid was greatly swollen; the conjunctiva, lining the lower lid, the lower fornix and the corresponding part of the bulb, was very prominent, with flakes of necrosed epithelium already visible; and the cornea, with the exception of a small segment at its upper part, was completely white in colour. Sterilized sweet almond oil, after thorough cleansing of the lower cul-de-sac and conjunctiva to remove all traces of any caustic soda remaining, was immediately applied. Iced compresses and cocaine drops were then employed to allay the severe inflammation and pain. Great care was afterwards taken to try and avoid symblepharon of the lower lid, where the action of the caustic was most deep. The case progressed favourably, so much so, that the patient was discharged a month after with sufficiently good sight; the cornea regaining its transparency, with the exception of a slight nebula situated below the pupil and a very slight symblepharon at the inner side of the lower fornix, which caused the patient no inconvenience.

Both the patients, suffering from Atrophy of the eye-

ball, refused prothesis, which was all that could possibly have been done for them.

The case of Glioma was observed in a two year old girl, appearing first in the right eye. The parents, after consulting me, were so frightened with the result of my examination and prognosis, that they decided to take her over to Naples at once, where however my diagnosis was fully confirmed and the enucleation I had advised also proposed and once more refused. Two months later the same thing appeared in the left eye, the poor little girl becoming completely blind. Death however will, in all probability, put a stop before long to her miserable condition and suffering.



Having given a brief account of the kind of diseases treated under each class, I shall now give a general summary of the operations performed during the year, with a more detailed account of the operative methods used and the results obtained.

OPERATIONS PERFORMED

	Males	Females	Total	Result
I. <i>On the Eyelids</i> :—				
For Blepharophymosis ...	1	0	1	Improved
„ Epithelioma	1	1	2	Cured
„ Trichiasis	10	24	34	„
„ Chalazion	5	2	7	„
„ Abscess	0	1	1	„
„ Dermoid Cyst	0	3	3	„
„ Entropion	2	0	2	„
II. <i>On the Lachrymal Apparatus</i> :—				
For Obstruction of Nasal duct with Dacryocystitis	1	4	5	„
„ Lachrymal Fistula ..	0	3	3	„
III. <i>On the Conjunctiva</i> :—				
For Pannus	6	2	8	„
„ Polypus	0	1	1	„
„ Subconjunctival Cysticercus	0	1	1	„
„ Pterygium	7	10	17	„
„ Atrophy of the fornix	0	1	1	Failed
IV. <i>On the Cornea</i> :—				
For Ulcus Serpens	2	2	4	{ 3 Cured 1 Failed
„ Adherent Leucoma ...	0	1	1	Improved
„ Foreign body	2	0	2	Cured
V. <i>On the Lens</i> :—				
For Senile Cataract	2	5	7	Cured
VI. <i>Glaucoma</i> :—				
Iridectomy for Glaucoma...	1	0	1	Improved
Total	40	61	101	{ 96 Cured 3 Improved 2 Failed

I. OPERATIONS ON THE EYELIDS

Canthoplasty was performed in a youth on both sides for marked Blepharophymosis due to chronic Trachoma.

Method used:—The external canthus is divided, with a single stroke of the scissors, after cocanizing the part; the bulbar conjunctiva is then detached for a short distance and three medium silk sutures are passed; one, at the outer end of the slit made, including skin and conjunctiva, the other two, one above and the other below, also including skin and conjunctiva making the latter cover the raw surfaces so as to avoid reunion.

Excision was performed on the two cases of Epithelioma.

Method used:—The one on the lower lid was removed by means of a V shaped incision, including the entire thickness of the lid, followed by suture; the one situated at the inner canthus and originating from the skin of the side of the nose was extirpated by means of two semi-lunar incisions, followed by scraping of the underlying periosteum and suture. Both cases healed by first intention.

The operation for Trichiasis was performed on 34 occasions in 30 individuals, four of them having required the act on both sides. The results obtained were excellent in all cases; as the operation leaves no perceptible traces of cicatrix, and the eyelashes regain their normal position.

Method used: — Professor Angelucci's method was adopted in all cases, it being an exceedingly rational operation, both with regard to its effectiveness, as well as with reference to its leaving no deformity whatever in the eyelid. In the majority of the cases operated, in fact, no sign of the operative act is traceable. The method consists in separating the edge including the eyelashes from the rest of the palpebra, by means of an incision interesting the whole thickness of the palpebra down to the conjunctiva and extending all along in a direction parallel to the palpebral edge at a distance of two millimeters from it. A

semilunar shaped portion of the skin of the palpebra, with part of the underlying orbicularis muscle, of different width according to the effect required, is next removed. Sutures are now passed uniting the upper edge of the wound made and part of the orbicularis left, with the skin of the upper edge of the bridge resulting from the first incision. I invariably use horsehair suture for the purpose, which practically leaves no marks.

All operated cases are sent home to follow their usual occupation, the eye being left bandaged up for four or five days, when they return to the Institute to have the sutures removed; and are generally discharged cured on the eighth day after the operation.

In the seven cases of Chalazion, incision of the cyst, parallel to the palpebral edge, was performed from the skin or conjunctival side, according to where the cyst projected most. This was followed by scraping and thorough cleansing of the cyst cavity. A cold dressing and bandaging was applied, the parts healing up by first intention in a couple of days.

The abscess of the upper lid, fully a pigeon's egg in size, was observed in a girl, and was treated by means of an incision in the horizontal direction, emptying its contents. This was followed by the application of toric fomentations. The case progressed favourably and the patient was discharged cured a fortnight after.

Of the three dermoid cysts, two were situated at the usual spot, viz: the outer side of the eyebrow; but the third was found occupying an uncommon site, viz: the inner end of the eyebrow on the left side, going deeply into the orbit. This cyst was made of three lobes, containing a thick sebaceous white substance, no hair or other structure being detected within the same. Extirpation of the cyst was performed in all three cases, the last mentioned one requiring slight scraping, small portions of its walls remaining behind, owing to the depth it reached and the

impossibility of wholly removing the three superimposed lobes, without injuring the adjacent orbital periosteum and muscles. All three cases ended in recovery.

The two cases of Entropion were rather interesting, having existed for a considerable time and having both been previously operated on by others with no result. One of them had had two operations performed, the entropion and trichiasis of the right lower lid remaining unaltered. When this patient came under my observation, the inferior lachrymal punctum was deviated inwards to such an extent, as to be directly applied to the eyeball. The epiphora resulting caused severe and extensive eczema of the cheek. The operation performed consisted in removing a rhomboid shaped piece of skin from the outer side of the lower lid, followed by sutures. The wound, healing by first intention, gave the desired effect. The second case was still worse, the entropion interesting both lids; and, so marked in the lower lid, as to cause the ciliary border to completely disappear from view, even when the patient kept the eye open, which he could however do with great difficulty. Angelucci's method was used to correct the Trichiasis of the upper lid. The severe entropion of the lower lid was remedied by means of the removal of a rhomboid shaped piece of skin from the outer side, as in the previous case, together with another piece included between two linear incisions parallel to the palpebral edge and extending all along the palpebra. The result here was equally effective, the palpebra regaining its natural position.

II. OPERATIONS ON THE LACHRYMAL APPARATUS.

With regard to the diseases of these passages, I am greatly in favour of the conservative treatment, as I have already stated above, when describing the diseases of this apparatus. In five cases only, out of twenty, I found myself obliged to use Bowman's method, following up the opera-

tion by gradual dilatation. The same method was used in the three cases of fistula, after scraping of the sac. These last three cases took some time to recover completely.

III OPERATIONS ON THE CONJUNCTIVA.

Syndectomy, performed in eight cases of Trachoma for severe pannus, after the palpebral conjunctiva had improved under energetic treatment, has rendered me valuable service.

Method used:—Having cocainized the eye, I apply the speculum; and, making the patient look well down, I fix the eye above as in cataract operation (described later under that heading) but slightly higher up. I now pass on to make two parallel incisions, concentric with and as close to the limbus as possible, a little more than one millimetre distant from each other and extending over the portion of conjunctiva containing the blood vessels, which go to maintain the pannus. I follow this up by the dissection of the portion of conjunctiva included between the two incisions. The surface thus exposed is now touched with a 2 % solution of Nitrate of silver, the excess being neutralized with a solution of Chloride of Sodium; Adrenaline and Cocaine drops are applied and the eye bandaged. In cases of general pannus, the same process is repeated below the cornea in another sitting, the upper one having been allowed to heal up. The operation has proved beneficial throughout, causing the pannus to disappear after some time, leaving a more or less transparent cornea, according to the severity and standing of each case.

The Polypus of the conjunctiva, situated at the inner side of the superior fornix, was excised with forceps and scissors, the bleeding surface left being cauterized with the Mitigated Nitrate of Silver stick, neutralizing the excess. The patient recovered completely.

In the case of Subconjunctival Cysticercus the lower lid was drawn well down and the greater part of the cyst excised, canterizing the remainder. The eyelid healed leaving no marks.

The operations performed for Pterygium amounted to 17 in all: seven men and six women requiring its ablation on one side only, and two other women on both sides.

Method used:—Arlt's method was used in all the cases, some of them requiring scraping of the cornea after dissection of the growth. Although some were exceedingly advanced, the result has always turned out satisfactory. No relapses were observed.

IV. OPERATIONS ON THE CORNEA.

The method used in those cases of *Ulcus Serpens*, which did not yield to the medicinal treatment, was the surgical, viz: incision of the cornea in the lower segment evacuating the hypopyon. This measure was resorted to in four cases, three of which recovered with a small leucoma; while, in the fourth case, the hypopyon recurred, and the patient not returning, I am unable to give the final result. The eye, however, must have gone lost, the case having been exceedingly serious from the very onset.

Iridectomy for optical purposes was performed in the case of adherent leucoma following purulent conjunctivitis. The sight of that eye has greatly improved since.

The two cases of foreign body, consisting of small pieces of iron, embedded in the superficial layers of the cornea, were subjected to extraction, which gave a good result in both.

V. OPERATIONS ON THE LENS.

Extraction of senile cataract was performed on seven patients only, during the year, for the reasons stated above. All these operations gave excellent results.

Method used:—The method adopted corresponds closely with that of Professor Angelucci of Naples, with slight modifications (which in some particulars agree with that of Mr. Treacher Collins of Moorfields), viz: the small iridectomy and the T shaped incision of the capsule. The method bears the advantage of completely discarding the use of the

speculum, which I consider a great improvement, diminishing as it does considerably the chances of prolapse of the vitreous. The fixation forceps instead of below are applied above as practiced by Prof. Angelucci. I have however found it unnecessary to remove the fixation forceps in the act of performing the iridectomy, as he does, which I think is preferable. In fact, the act of again applying the fixation forceps, after the iridectomy has been performed, to be able to complete the extraction, is, according to my views, very dangerous; because it might be a cause of dislocation of the lens, of loss of vitreous, of prolapse of iris, besides unnecessary gaping of the wound, which could only favour the penetration of infected air into the anterior chamber.

Once the fixation forceps are applied, I see no reason why their hold should be withdrawn at all before the operation is over; their use being here equal to that of the speculum, in as much as they keep up the upper eyelid and do not allow the patient to shut the eye.

Having applied the fixation forceps, I go on with the incision of the cornea, using a narrow Graefe's knife. The puncture and counterpuncture are made to lie in the limbus, while the upper part of the incision is made to reach the upper margin of the cornea, the edge of the knife being turned forwards in the act of completing the incision. No conjunctival flap is used. This being done, I pass on to a small iridectomy, the assistant holding the fixation forceps only for the short time required to perform it. I invariably make a small iridectomy being convinced of its advantages. The third step consists in the T shaped incision of the capsule; and the fourth in extraction of the lens. The fixation forceps are *now* removed. Toilet of the anterior chamber and replacement of the iris are performed where found necessary. The eye is cleansed with sterilized water and a bandage applied including both eyes. The patient is recommended perfect rest in bed for the first 48 hours, when the eye is dressed for the first time after the

operation. The non-operated eye is uncovered at the second dressing, that is on the fourth day. On the eighth day bandaging is done away with, the eye being protected by a dark shade.

As an average the patient is discharged a fortnight after the operation.

Glasses are not chosen before six weeks have elapsed from the date of extraction.

All the cases operated for cataract recovered completely, no accidents having occurred during or after any of the seven extractions performed.

The method described above differs as much from Professor Angelucci's *classical* method as it agrees with his ordinary method. His classical method has the great advantage of reducing the steps of the operation to two only. The capsule is incised as part of the first step, by slightly dipping the point of the Graefe knife into the capsule, as it is going through the anterior chamber, before reaching the site of the counterpuncture. The second step consists in extraction without iridectomy. The method however requires great dexterity on the part of the operator.

GLAUCOMA.

Only one case of Glaucoma was operated on. It was in a man, who complained of severe pains in the left eye, which was congested and presented marked tension. The sight had completely left that eye long before the patient came to the Institute. Enucleation would have been highly indicated, but a large iridectomy was first tried and this was found sufficient in procuring the desired effect. In fact, while performing the iridectomy, the patient tried to shut the eye with a jerk, which made him lose a slight amount of vitreous. This, in my opinion, helped a good deal towards attaining the result wanted. The eye healed without further incidents and the filtrating cicatrix resulting, relieved the pain and tension completely.

In conclusion, I beg to tender my best thanks to my colleagues for the encouragement they have given me by sending me a good many patients for treatment. I must not forget to thank also the persons of influence in the different villages of the Island, who, being convinced of the good derived by those already treated and cured in the Institute, continue to recommend the place to all their friends and especially to the poorer classes, for whose benefit the Institute was mainly founded. I also feel very grateful to the local Press for the support extended to me in furthering the philanthropic object of the Institute, and last but not least, to the patients themselves, who, feeling full confidence in my treatment, have attended in large numbers, thus materially contributing to the success of the Establishment.

C. MANCHÉ.

